Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for translating an animation vector to a target mix vector, the method comprising ~~steps for~~:

generating a calibration vector; and

mapping the animation vector to the target mix vector using the calibration vector and using an interpolation in the animation vector between target points.

2. (New) The method of claim 1 wherein mapping the animation vector to the target mix vector using the calibration vector includes automatically performing the mapping.

3. (New) The method of claim 1 wherein mapping the animation vector to the target mix vector using the calibration vector includes multiplying the animation vector by the calibration vector, which comprises a diagonal matrix.

4. (New) The method of claim 1 wherein mapping the animation vector to the target mix vector includes using a linear mapping technique.

5. (New) The method of claim 1 wherein mapping the animation vector to the target mix vector includes mapping by using a set of basis functions as input, including using radial basis function mapping.

6. (New) The method of claim 5, further comprising:

dividing targets into independent groups of target points; and

applying different mapping algorithms to different groups of target points.

7.   (New)   The method of claim 1, further comprising using audio-visual sensing to track facial features for the animation vector.

8.   (New) An article of manufacture, comprising:

a machine-readable medium having instructions stored thereon to cause a processor to translate an animation vector to a target mix vector, by:

generating a calibration vector; and

automatically mapping the animation vector to the target mix vector using the calibration vector.

9.   (New)   The article of manufacture of claim 8 wherein the machine-readable medium further includes instructions stored thereon to cause the processor to translate the animation vector to the target mix vector by mapping using an interpolation in the animation vector between target points.

10.   (New)   The article of manufacture of claim 8 wherein the instructions to automatically map the animation vector to the target mix vector using the calibration vector includes instructions to multiply the animation vector by the calibration vector, which comprises a diagonal matrix.

11.   (New)   The article of manufacture of claim 8 wherein the instructions to automatically map the animation vector to the target mix vector using the calibration vector includes instructions to map using a set of basis functions as input.

12.   (New)   The article of manufacture of claim 11 wherein the instructions to map using the set of basis function as input includes instructions to use linear mapping.

13.   (New) The article of manufacture of claim 11 wherein the instructions to map using the set of basis function as input includes instructions to use radial basis function mapping.

14.   (New) A system for translating an animation vector to a target mix vector, the system comprising:

a means for generating a calibration vector; and

a means for automatically mapping the animation vector to the target mix vector using the calibration vector and using an interpolation in the animation vector between target points.

15.   (New) The system of claim 14 wherein the means for automatically mapping the animation vector to the target mix vector using the calibration vector includes a means multiplying the animation vector by the calibration vector.

16.   (New) The system of claim 14, further comprising a means for visually sensing to track facial features for the animation vector.

17.   (New) The system of claim 14 wherein the means for mapping the animation vector to the target mix vector includes a means for mapping by using a set of basis functions as input.

18.   (New) The system of claim 17 wherein the means for mapping by using the set of basis functions as input includes a means for mapping using a radial basis function.

19.   (New) The system of claim 14 wherein the means for mapping the animation vector to the target mix vector includes a means for mapping using a linear mapping technique.

20.   (New) The system of claim 14, further comprising additional means for cooperating with the animation vector, calibration vector, and target mix vector to animate a head image.